

VESTA – resurvey of natural, non-forest vegetation (Central Europe)

Krzysztof Świerkosz¹, Kamila Reczyńska²

¹ Museum of Natural History, Faculty of Biological Sciences, University of Wrocław, Wrocław, Poland

² Department of Botany, Faculty of Biological Sciences, University of Wrocław, Wrocław, Poland

Corresponding author: Kamila Reczyńska (kamila.reczynska@uwr.edu.pl)

Academic editor: Florian Jansen ♦ **Received** 5 October 2022 ♦ **Accepted** 3 November 2022 ♦ **Published** 14 November 2022

Abstract

“VESTA - resurvey of natural, non-forest vegetation (Central Europe)” is a thematic, resurvey database focused on documentation of changes in natural, non-forest communities. Currently, the database includes 549 relevés (231 replot for 84 sites) corresponding to the classes *Asplenetia trichomanis* (incl. *Polypodietea*), *Koelerio-Corynephoratea* (rocky grasslands), *Loiseleurio-Vaccinietea* and *Betulo carpaticae-Alnetea viridis*.

The project is continuous in character. It is based on the phytosociological relevés from own field studies which have been carried out in the Sudetes Mts. and their foothills since 1989. The subject of research have been all types of rocky communities (chasmophytic, grasslands, thickets), mountain and submountain tall-herb communities, subalpine thickets and heathlands.

Relevés are collected according to the standard Braun-Blanquet method (species coverage scale: r, +, 1, 2, 3, 4, 5) and on rectangular or square-shaped surfaces with possible adjustment to the shape of the rocky outcrops. Initially (until 2008), the location of plots was marked on maps and field sketches. However, the fact that all relevés were collected by the owners of the database made it easier to revisit all plots and assigned a location compatible with GPS with SiRFstar III chipset. The accuracy of position measurements varies between 2 and 15 meters (on average 10 meters). Aspect is determined using electronic compass linked to GPS. Altitude is obtained from Google Earth and corrected with landmarks from topographical maps if necessary. The shading of the plots has been visually assessed so far. The bedrock type is derived from a Detailed Geological Map of the Sudetes (<http://sudety.pgi.gov.pl/>). Subsequent resurveys of the plots are conducted during field visits planned specifically for this purpose or during other research carried out in the same area.

Keywords

Betulo carpaticae-Alnetea viridis, *Asplenetia trichomanis*, chasmophytic vegetation, *Koelerio-Corynephoratea*, *Loiseleurio-Vaccinietea*, non-forest vegetation, Poland, replot vegetation database, rocky grasslands, Sudetes mountains

GIVD Fact Sheet

GIVD Database ID: EU-PL-004		Last update: 2022-11-03	
VESTA - resurvey of natural, non-forest vegetation (Central Europe)		Web address:	
Database manager(s): Krzysztof Swierkosz (krzysztof.swierkosz@uwr.edu.pl); Kamila Reczynska (kamila.reczynska@uwr.edu.pl)			
Owner: Krzysztof Swierkosz & Kamila Reczynska			
Scope: Resurvey database focused on documentation of changes in marginal, natural and non-forest, rocky, tall-herb and scrub phytocoenoses from Central Europe			
Abstract:			
Availability: according to a specific agreement		Online upload: no	Online search: no
Database format(s): TURBOVEG		Export format(s): TURBOVEG, Excel, other, XML	
Plot type(s): time series		Plot-size range (m²): 2 to 100	
Non-overlapping plots: 231	Estimate of existing plots: 500	Completeness: 46%	Status: ongoing capture
Total no. of plot observations: 549	Number of sources (biblioreferences, data collectors): 2		Valid taxa: 454
Countries (%): PL: 100%			
Formations: Non Forest: 100% = Terrestrial: 100% (Arctic-alpin: 6%; Non arctic-alpin: 94% [Natural: 94%])			
Guilds: all vascular plants: 100%; bryophytes (terricolous or aquatic): 30%			
Environmental data (%): altitude: 100%; slope aspect: 100%; slope inclination: 100%; other attributes: bedrock type, shadow of the locality			
Performance measure(s): cover: 100%			
Geographic localisation: GPS coordinates (precision 25 m or less): 100%			
Sampling periods: 1980-1989: 1.2%; 1990-1999: 12.2%; 2000-2009: 5%; 2010-2019: 65.4%; unknown: 15.9% after 2020			
<i>Information as of 2022-11-03; further details and future updates available from http://www.givd.info/ID/EU-PL-004</i>			

E-mail and ORCID

Krzysztof Świerkosz (krzysztof.swierkosz@uwr.edu.pl), ORCID: <https://orcid.org/0000-0002-5145-178X>
Kamila Reczyńska (Corresponding author, kamila.reczynska@uwr.edu.pl), ORCID: <https://orcid.org/0000-0002-0938-8430>